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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,839	12/19/2006	Jean-Luc Bernard	291090U/SOX PCT	7582
22850	7590	11/10/2011		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
ZHU, WEIPING				
ART UNIT		PAPER NUMBER		
1734				
NOTIFICATION DATE		DELIVERY MODE		
11/10/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/580,839

**Applicant(s)**

BERNARD ET AL.

**Examiner**

WEIPING ZHU

**Art Unit**

1734

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 1,3,4,6,7 and 10-22 is/are pending in the application.
- 5a) Of the above claim(s) 11-16 is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1,3,4,6,7,10 and 17-22 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-SB-005)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 24, 2011 has been entered.

### ***Status of Claims***

2. Claims 1, 3, 4, 6, 7, 10 and 17-22 are currently under examination wherein claim 22 has been newly added in applicant's amendment filed on October 24, 2011.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

Subject to the [fifth paragraph of 35 U.S.C. 112], a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

3. Claim 3 is rejected under 35 U.S.C. 112, 4th paragraph, as being of improper dependent form for failing to further limit the subject matter of the claim upon which it depends, or for failing to include all the limitations of the claim upon which it depends.

The limitation of the carbon content in claim 3 fails to further limit the carbon content in claim 1 from which claim 3 depends, rendering claim 3 an improper dependent claim.

Applicant may cancel the claim(s), amend the claim(s) to place the claim(s) in proper dependent form, rewrite the claim(s) in independent form, or present a sufficient showing that the dependent claim(s) complies with the statutory requirements.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 4, 6, 7, 10 and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 52-105526 A.

With respect to claims 1, 3, 4, 6, 7, 10, 17-19, 21 and 22, JP ('526 A) discloses a heat-resisting Co base alloy comprising a Cr-containing matrix strengthened by precipitation of carbides (e.g. titanium carbides) and consisting essentially of by wt.% a composition as shown in the table below (page 132).

Elements	Instant Claims	JP ('526 A)	Overlapping Ranges
Cr	23-34	10-35	23-34
Ni	6-12	0-30	6-12
Ti	0.5-5, 0.6-5, 0.6-4, 0.6-3	0-2	0.5-2, 0.6-2, 0.6-2, 0.6-2
Ta	0-7, 1-7, 2-6, 1.5-<5	0-10	0-7, 1-7, 2-6, 1.5-<5
C	0.2-1.2, ≥0.2-1.2, ≥0.6-1.2	0.01-1.0	0.22-1.0, ≥0.22-1.0, ≥0.6-1.0
Fe	<3	0-8	<3
Si	<1	0	0
Mn	<0.5	0	0
Co	Balance	Balance	

The contents of Cr, Ni, Ti, Ta, C and Fe as disclosed by JP ('526 A) overlap the contents respectively as claimed in the instant claims 1, 3, 6, 7, 10, 17, 19, 21 and 22.

The instantly claimed Si and Mn contents of less than 1% and 0.5% do not require the presences of Si and Mn, because the claimed contents also include the 0%. JP ('526 A) does not disclose the presences of Si and Mn, which would read on the instantly claimed Si and Mn contents. The  $(Ti + Ta)/C$  ratios of JP ('526 A) would obviously overlap the  $(Ti + Ta)/C$  ratios as claimed in the instant claims 4 and 18 because the contents of Ti, Ta and C as disclosed by JP ('526 A) overlap the claimed contents of Ti, Ta and C respectively as discussed above. A prima facie case of obviousness is established. See MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the claimed composition within the disclosed composition of JP ('526 A) with expected success, because JP ('526 A) discloses the same utility over the entire disclosed ranges.

With respect to claim 20, JP ('526 A) discloses that the alloy further contains Zr (page 132).

### ***Response to Arguments***

5. The applicant's arguments filed on October 24, 2011 have been fully considered but they are moot in light of the new ground of rejection above.

### ***Conclusions***

6. This Office action is made non-final. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emily Le can be reached on 571-272-0903. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Weiping Zhu/  
Examiner, Art Unit 1734

10/31/2011